

# CLIMBING



## Recovery Strategies to Enhance Your Performance

As Muay Thai continues to expand and develop as a sport, it's important both competitors and trainers do also, gaining further understanding of their athletes performance capabilities. One way to do this is to seek ways of how to improve their recovery processes. While there's an array of products available on the market claiming to facilitate this process, it's important participants understand the different methods of recovery practices, and best how to implement them. Adopting the appropriate recovery strategies will ensure every athlete is capable of training to their maximum potential, reducing the time between bouts, and enhancing their career longevity. This article will outline the different recovery techniques/methods available and provide an example of how to effectively implement them after a bout.

BY NATHAN PARNHAM IMAGES BY GETTY



# MUAY THAI

## Nutrition/Hydration

It is important competitors enter a bout adequately nourished post weigh-in to ensure their energy stores (i.e. glycogen) are replenished. Ideally, the less weight a fighter has to drop prior to a bout the better, and in the event they require any reduction it should occur gradually in a planned manner. It is essential fighters are well hydrated because those exposed to collision in contact sports are more likely to receive contusions (corks) in a dehydrated state. Post fight, competitors should immediately aim to ingest adequate carbohydrate and protein-based foods to facilitate tissue repair/energy restoration. Often it may be difficult to obtain such food, and in this instance liquid meal replacements are suggested (i.e. Up and Go/Sustagen).

## Cool-down/active-passive recovery

This enhances the body's ability to clear any blood lactate and

associated substrates as a result of high intensity activity. Completing activities that replicate those in Muay Thai at a light intensity will achieve this. An example of this may be as simple as some light shadow boxing. Some comfortable static stretching following this will also assist with clearing substrates and gradually reducing core/muscular temperature.

## Cryotherapy/Ice application

This restricts blood flow to the injured site, limiting the inflammatory response and as a result will decrease any potential swelling. The application of ice directly to any soft tissue injuries is highly recommended immediately following a bout and should continue at varying intervals within 24 to 48 hours after a bout.

## Compression

By applying a firm bandage, compression can assist in minimising

bleeding, and thus reduce swelling. Ideally, a firm bandage should be applied to the injured muscle after trauma starting from the bottom and working towards the top (i.e. knee toward hip for thighs). With a variety of compression garments available these can often be more practical. Compression garments have been proven to also reduce the inflammatory response at a muscular and cellular level. In considering their use one should consider how firm the compression is, the area covered, and the timing of their use. Compression garments should be used immediately after a bout, and continue for 24-to-48 hours. Full length compression pants combined with those for the torso will assist in your recovery relative to Muay Thai.

## NSAID (Non-steroidal Anti-Inflammatory Drugs)

These have anti-inflammatory properties, and can serve to reduce pain and swelling caused from soft

Footballers have been using cold water treatment for years



tissue injuries. NSAIDs may also assist participants in returning to light activity sooner in the days after a bout facilitating the recovery process.

### **Cold water immersion/contrast baths or showers**

Cold water immersion enhances the recovery process and minimises inflammatory responses by decreasing core/muscle temperature and oxygen demand by constricting blood vessel size and limiting blood flow. Water temperature can range in temperature from 2–12 degrees Celsius (generally 8–12 degrees is recommended). This should occur as soon as possible after a bout and continue at varying intervals for 24 hours following. Contrast baths or showers use the aid of hot water to encourage blood circulation creating a pumping effect, enhancing tissue

nourishment. This is particularly useful in the days following a bout (48–72 hours), once initial injuries have been treated.

### **Hydrotherapy**

This involves the use of water to create buoyancy while performing movements similar to those within a sport. Various aids may assist with this including buoyancy vests, belts and other floatation devices. Completed within days immediately after strenuous exercise it has been proven to reduce perceived muscle soreness/stiffness. It is also beneficial in those instances where injuries sustained may limit an individual's ability to partake in weight bearing activities (i.e. jogging/shadow boxing).

### **Soft tissue massage**

Soft tissue massage assists by

increasing muscle pliability encouraging it to return to initial length and contractile potential, while aiding damaged tissues. Soft tissue massage also reduces the likelihood of haematoma (blood clotting) formation. This type of massage is usually preferred in the days after intense exercise to ensure no adverse affect is transferred to specific injuries (i.e. corks).

Below is an example of a post fight recovery plan that may be administered immediately, and in the days following a bout.

While the scientific research is limited regarding the quantifiable effectiveness of proven recovery strategies, the theoretical and psychological benefits far outweigh the negatives. It is also acknowledged that some of the above prescribed recovery strategies may not be financially viable, or easily accessible, however, a variety have been provided to allow each athlete to select according to their individual circumstance. Should any further concerns arise from injuries sustained after a bout, individuals must seek professional medical advice. One particular brand soon to be released on the market to keep an eye out for in future is that of Counter Fight™. They specialise in recovery products tailored specific to the combat sports arena. **IK**

#### **Post Fight**

- Complete active recovery (1x round light shadow boxing)
- Passive recovery (partnered stretching) by trainer/stretch band
- Nutrition: consume liquid meal replacement (i.e. protein shake), and any fluids lost (sports drink/water)
- Cold shower
- Apply ice packs to various sites likely to be injured (i.e. legs)
- Wear compression garments if feasible
- Refrain from consuming Alcohol as this will only promote further bleeding/swelling or injured sites
- NSAIDS

#### **24–48hrs**

- Hydrotherapy promoting movement such as light shadow boxing under water
- Frequent use of ice-packs through day (approx. 15min every 2hrs)
- Cold bath/shower (approx. 8–12degrees C)
- Continue with compression garments where possible
- NSAIDS

#### **48–72hrs**

- Continue with compression garments where possible
- Stay adequately hydrated
- Continue cold bath/shower
- NSAIDS

#### **>72hrs**

- Commence light activity where possible from walking/cycling through to light shadow boxing (obviously dependant on extent of injuries)
- Light stretching
- Introduce contrast bath/showers (ratio of 2min:1min Hot:Cold)
- Continue with compression garments
- Begin soft-tissue massage as tolerated
- Return to light training
- Continue soft-tissue massage

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